

Pollution Control Project Standard Permit Technical Review

Company	Coletto Creek Power, LLC	Permit Number	179653
City	Fannin	Project Number	390926
County	Goliad	Regulated Entity Number	RN100226919
Project Type	Initial	Customer Reference Number	CN605521988
Project Reviewer	John Ma	Standard Permit No.	6001 non-Rule
Site Name	Coletto Creek Power Station	Project Received Date	March 28, 2025

Project Overview

Coletto Creek Power, LLC has submitted Form PI-1S to authorize the conversion of the Unit 1 Boiler from burning coal, lignite, petcoke, fuel oil to burning natural gas. As a result of this project, there will be an overall decrease in NO_x, SO₂, PM, H₂SO₄. However, there will be an increase in VOCs because of this firing conversion. This project will include new fugitive components and MSS as a result. The company has provided a completed PSD applicability review for the VOC increases. An impacts analysis was provided to demonstrate that the collateral increases from this project will be NAAQS compliant. This project will be incorporated into NSR Permit No. 3687 when it is amended or renewed.

Per the company, this project will meet Condition (1)(B)(ii) of the standard permit. The conversion to pipeline-quality natural gas would meet TCEQ Tier I BACT control techniques. From a BACT standpoint, the company is minimizing oil fuel activities and using pipeline quality natural gas which would align with current BACT. In addition, Coletto Creek Power referenced the work practice standards required by 40 CFR §63.10000(a). Table 3 of MACT UUUUU includes the requirement to use clean fuels (such as natural gas) for ignition during startup, as those terms are defined in §63.10042. This control technique serves to limit emissions before controls such as scrubbers or SCRs can become fully operational in the startup process. In promulgating this requirement, EPA applied the use of clean fuels as the required control technique during those periods of time. Therefore, the use of clean fuels such as natural gas would result in a reduction in emissions and should be considered as an emissions control technique. This project will meet the applicability of the PCP.

EPN	Source	Permit	Pollutant	Pre-Project		Post-Project		Change	
				lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Unit 1	Unit 1 Boiler (Natural Gas)	3687	NO _x	1150.05	5037.22	1150.05	3909.76	--	-1127.46
			CO	5053.25	11692.17	5053.25	11692.17	--	--
			VOC	23.76	104.06	51.01	167.56	+27.25	+63.50
			PM	210.94	923.95	47.51	208.08	-163.43	-715.87
			PM ₁₀	210.94	923.95	47.51	208.08	-163.43	-715.87
			PM _{2.5}	210.94	923.95	47.51	208.08	-163.43	-715.87
			SO ₂	7597.00	33276.00	356.83	1562.92	-7240.17	-31713.08
			Hg	0.05	0.23	<0.01	0.01	-0.05	-0.22
NGFUG	Natural Gas Piping Fugitives	179653	VOC	--	--	<0.01	0.02	<0.01	0.02
MSSNG	Natural Gas Piping Maintenance	179653	VOC	--	--	0.13	<0.01	0.13	<0.01
Net Project Emissions							NO _x	--	-1127.46
							CO	--	--
							VOC	+27.38	+63.52
							PM	-163.43	-715.87
							PM ₁₀	-163.43	-715.87
							PM _{2.5}	-163.43	-715.87
							SO ₂	-7240.17	-31713.08
							Hg	-0.05	-0.22

Note: H₂SO₄ is not listed on the Permit 3687 MAERT for Unit 1 but is included in the PM/PM₁₀ totals as condensable particulate matter.

Emission Summary

Emission Point No.	Source Name	NSR Permit	Pollutant	Authorized PCP Emissions	
				lbs/hr	tpy
Unit 1	Unit 1 Boiler (Natural Gas)	3687	NO _x	1150.05	3909.76
			CO	5053.25	11692.17

Pollution Control Project Standard Permit Technical Review

Permit No. 179653
Page 2

Regulated Entity No. RN100226919

			VOC	51.01	167.56
			PM	47.51	208.08
			PM₁₀	47.51	208.08
			PM_{2.5}	47.51	208.08
			SO₂	356.83	1562.92
			Hg	<0.01	0.01
NGFUG	Natural Gas Piping Fugitives	179653	VOC	<0.01	0.02
MSSNG	Natural Gas Piping Maintenance	179653	VOC	0.13	<0.01

Standard Permit Requirements - 30 TAC Chapter 116, Subchapter F Rules

General Requirement

§116.614 Permit Fee: \$ **900.00** Fee Reference No.: **759880 / 582EA000661561**
Expedited Surcharge: \$ **500.00** **759881 / 582EA000661561**

Is the following documentation included with this registration?

1. The General Requirements Checklist demonstrating compliance with 30 TAC §§ 116.110 and 116.601-615	Yes
2. Process description	Yes
3. Project description	Yes
4. Descriptions of any equipment being installed	Yes
5. Emission calculations including the basis of the calculations	Yes
6. Emission increases and/or decrease associated with this project (quantified)	Yes
7. Description of efforts to minimize any collateral emissions or collateral increases	Yes
Are any requirements of §116.110 circumvented by: (1) artificially limiting feed or production rates below the maximum capacity of the project's equipment; (2) claiming a limited chemical list; or (3) dividing and registering a project in separate segments?	No
If YES, are the limits intended to allow the project to move forward while waiting for a permit or permit amendment that will allow full-scale operations, particularly when the project would not be economically feasible until fully authorized?	N/A

Standard Permit Requirement

Will the project include replacement of the existing pollution control equipment and/or techniques?	Yes
If YES, is the new control technique at least as effective?	Yes
Will an increase in production capacity result from the installation of control equipment or the implementation of a control technique?	No
Does the project include installing a new production facility, reconstructing an existing production facility [as defined in 40 CFR §60.15(b)(1) and (c)], or completely replacing an existing production facility?	No
Without consideration of any other increases or decreases, will the project result in a significant net increase in emission of any criteria pollutant?	No
If YES, was site-wide netting performed for the contemporaneous period?	N/A
Does the net increase trigger PSD or nonattainment?	No
Are planned MSS emissions directly associated with the pollution control project included in this project?	Yes
If NO, discuss how the MSS emissions are currently authorized. Provide permit numbers, if applicable.	N/A
Is this project to allow the facility to come back into compliance with an enforceable limitation?	No
If YES, did the company provide the required justification?	N/A

Process Description/Review Summary

Pollution Control Project Standard Permit Technical Review

Permit No. 179653
Page 3

Regulated Entity No. RN100226919

Coletto Creek Power, LLC (CCP) owns a coal-fired electrical generation facility authorized under NSR Permit No. 3687 and PSD Permit No. PSDTX9M1. The electrical power is produced in a single boiler (EPN Unit 1) which is authorized to fire the following fuels: coal, lignite, petroleum coke, and fuel oil. Flue gas from the boiler is currently routed through a baghouse which removes fly ash before the flue gas is exhausted through the stack to the atmosphere. The utility boiler utilizes low NOx burners and an over fired air system to minimize emissions of nitrogen oxides.

CCP has submitted this project to authorize converting the Unit 1 boiler to a natural gas fired boiler. As a result of this project, there will be an overall decrease in NOx, SO₂, PM, H₂SO₄. However, there will be an increase in VOCs because of this firing conversion. Emission controls will include low-NOx burners and overfire air. The conversion will include work on various systems, including the furnace, burners, coal and ash handling equipment, economizer, air preheater, natural gas piping, and others. Since particulate matter control is not needed for natural gas combustion, the exhaust ducts will be diverted around the baghouse and the existing stack will remain in use.

PSD Applicability Review Summary

The boiler is a fossil fuel fired boiler of more than 250MMBtu/hr heat input, a named source. Per the project, increases will include an allowable increase of 63.52 tpy of VOCs. However, CCP has provided completed Tables 1F and 2F for the allowable increase in VOCs. The Correction value used for VOCs was calculated based on Emissions that Could Have Been Accommodated during the baseline period of October 2022 to September 2024. Reviewer has confirmed that the values used to calculate the Emissions that Could Have Been Accommodated are based on emission rates that were reported to Emissions Inventory. CCP has demonstrated that this project will not result in major modification and will not trigger the PSD review process.

	Pollutants (Baseline: October 2022 to September 2024)							
	VOC	NO _x	CO	PM	PM ₁₀	PM _{2.5}	SO ₂	H ₂ SO ₄
Unit 1 PTE Emissions	105.94	5037.23	11692.18	934.25	934.25	934.25	33276.01	25.12
Unit 1 Baseline Emissions	32.35	2197.69	4115.27	343.29	343.29	343.29	9070.44	6.84
Projected Actual Emissions	87.15	2033.08	2146.13	108.20	108.20	108.20	813.56	12.46
Difference	54.80	--	--	--	--	--	--	5.62
Correction	16.76	--	--	--	--	--	--	--
Project Emissions	38.04	--	--	--	--	--	--	5.62
PSD Significant Emission Rate (tpy)	40	40	100	25	15	10	40	7
Exceeds PSD SER?	No	No	No	No	No	No	No	No
NNSR Trigger Level (tpy)	--	--	--	--	--	--	--	--
Exceeds NNSR Trigger Level?	No	No	No	No	No	No	No	No

Note: H₂SO₄ is not listed on the Permit 3687 MAERT for Unit 1 but is included in the PM/PM₁₀ totals as condensable particulate matter.

Compliance History Evaluation

A compliance history report was reviewed on:	April 22, 2025
Site rating & classification:	0.00 / High
Company rating & classification:	0.00 / High

Impacts Evaluation - 30 TAC 116.111(a)(2)(J)

Modeling was provided to demonstrate NAAQS compliance for EPNs NGFUG and MSSNG. The company does not need to perform any further impacts evaluation for the contaminant increases since the project fell out of the MERA at Step 3.

Per Appendix B of Air Permits Division Guidance (APDG) 5874, TCEQ has determined that emissions from boilers only by pipeline-quality natural gas are not expected to cause adverse health effects and therefore do not require an additional impacts evaluation.

Pollution Control Project Standard Permit Technical Review

Permit No. 179653
Page 4

Regulated Entity No. RN100226919

Compound	Short Term ESL ($\mu\text{g}/\text{m}^3$)	1-hour GLC _{max} ($\mu\text{g}/\text{m}^3$)	Long Term ESL ($\mu\text{g}/\text{m}^3$)	Annual GLC _{max} ($\mu\text{g}/\text{m}^3$)	Further analysis required
Hexane	5,600	0.1713	200	Not required*	No
Butane	66,000	De minimis	7,100	De minimis	No
iso-Butane	23,000	De minimis	7,100	De minimis	No
Pentane	59,000	De minimis	7,100	De minimis	No
iso-Pentane	59,000	De minimis	7,100	De minimis	No
Propane	Simple Asphyxiant	--	Simple Asphyxiant	--	No

*Contaminants highlighted have increases with an annual ESL less than 10% of the short term. No other annual analysis was necessary.

Required Changes to NSR Permit When Incorporated

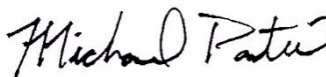
Update MAERT, Special Conditions as needed.

Recommendation Based on Representations

All conditions of Standard Permit satisfied? (Yes or No)	Yes
Final Action	Issue PCP
Other permit(s) or permits by rule affected by this action:	NSR 3687
List permit and/or PBR number(s) and actions required or taken:	Incorporate



April 30, 2025



May 2, 2025

Project Reviewer
John Ma

Date

Section Manager
Michael Partee

Date